

GENUS *TANYGASTER* BLATCHLEY, A NEW SYNONYM
OF *PHYLLOTRETA* CHEVROLAT
(COLEOPTERA: CHRYSOMELIDAE: ALTICINAE)

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ABSTRACT

The genus *Tanygaster* Blatchley is synonymized with *Phyllotreta* Chevrolat. This necessitates the new combination of *P. ovalis* (Blatchley) and the transfer of *T. lindahli* (Dury) back to *Phyllotreta*. A lectotype is designated for *P. lindahli*. The type series of both *P. ovalis* and *P. lindahli* have been found to be composite.

Genus *Phyllotreta* Chevrolat

Phyllotreta Chevrolat 1837:391. Type-species: *Chrysomela brassicae* F. (Designated by Chevrolat, *in d'Orbigny* 1845:6.)

Orchestris Crotch 1873:65. (not Kirby 1837). Type-species: *Chrysomela nemorum* L. (Synonymy by LeConte 1878:615).

Tanygaster Blatchley 1921:26-27. Type-species: *Tanygaster ovalis* Blatchley (by original designation and monotypy). **New Synonymy.**

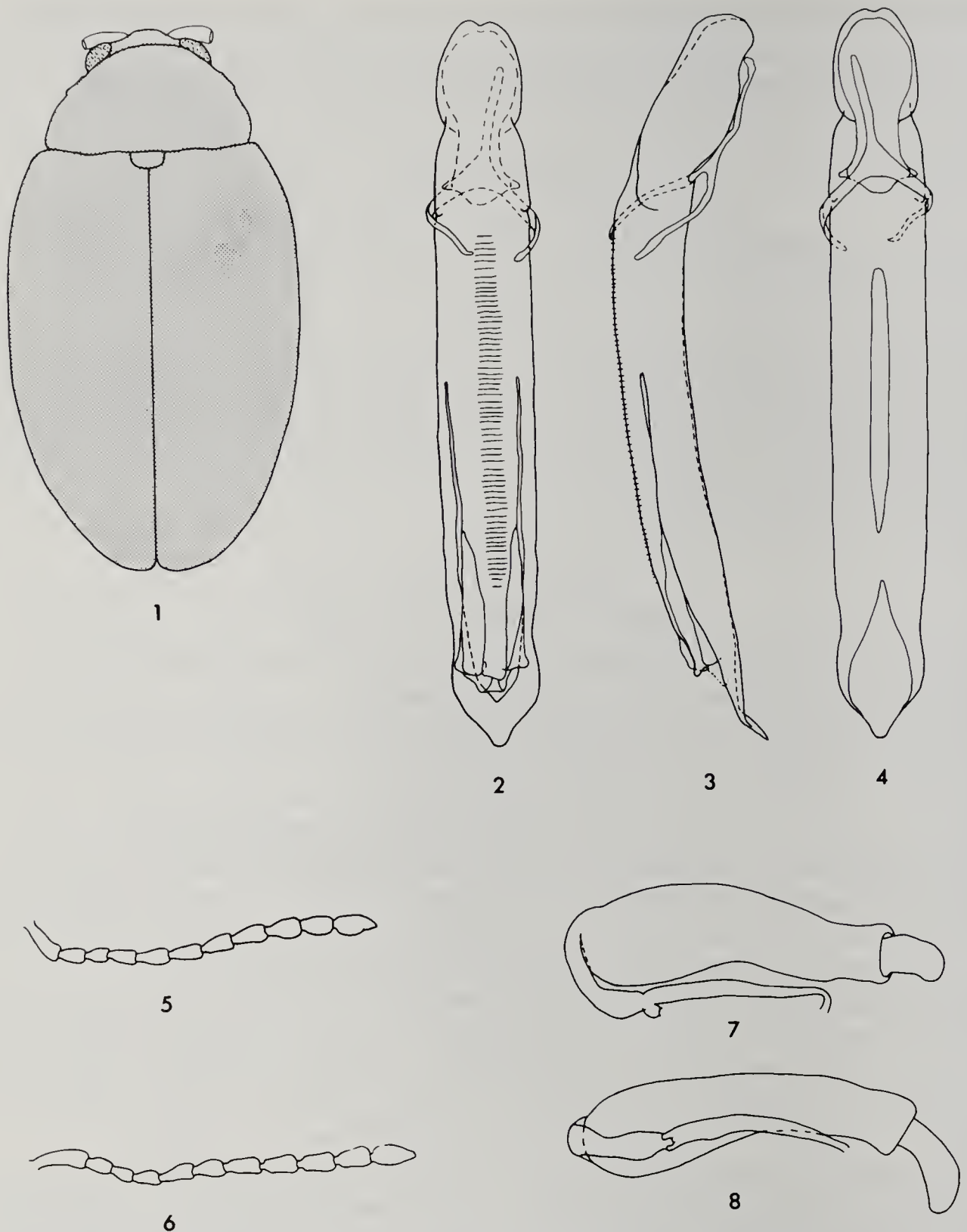
Blatchley (1921) proposed the genus *Tanygaster* for two male specimens collected separately in Marion Co., Indiana. He later (1930:45) designated the specimen collected May 5, 1918 as type (=lectotype). Therefore, the second specimen, collected June 6, 1912, became a paralectotype.

Chittenden (1927:59) credited Heikertinger (1924:59) with the idea that *Phyllotreta lindahli* Dury (1906:254) might belong in *Tanygaster*, but this species is not mentioned in the Heikertinger paper. Wilcox (1954:467-8) transferred *P. lindahli* to *Tanygaster* "because the front coxal cavities are closed." *Tanygaster* has subsequently contained these two species.

I became interested in *Tanygaster* during the preparation of my revision of *Phyllotreta* (Smith 1981) because of its close relationship to this genus and because of questions raised in my mind by the original placement of the Dury species and its later transfer. Subsequently, I have examined the Blatchley types of *T. ovalis* (at Purdue University) and Dury's four syntypes of *P. lindahli* (at Cincinnati Museum of Natural History).

Upon comparing the generic diagnoses of *Tanygaster* and *Phyllotreta*, and the lectotype of *T. ovalis* (Figs. 1-5) with several species of *Phyllotreta*, I found the generic characters to be the same or similar, with one exception. This exception concerns the condition of the procoxal cavities. Blatchley stated that the procoxal cavities of *T. ovalis* are closed but, in fact, they are open in both the lectotype and paralectotype as in *Phyllotreta*. The antennae and genitalia of the types are similar to those of *Phyllotreta*. Therefore I consider *Tanygaster* to be a synonym of *Phyllotreta*. This means that *T. ovalis* becomes *Phyllotreta ovalis* (Blatchley) **New Combination.**

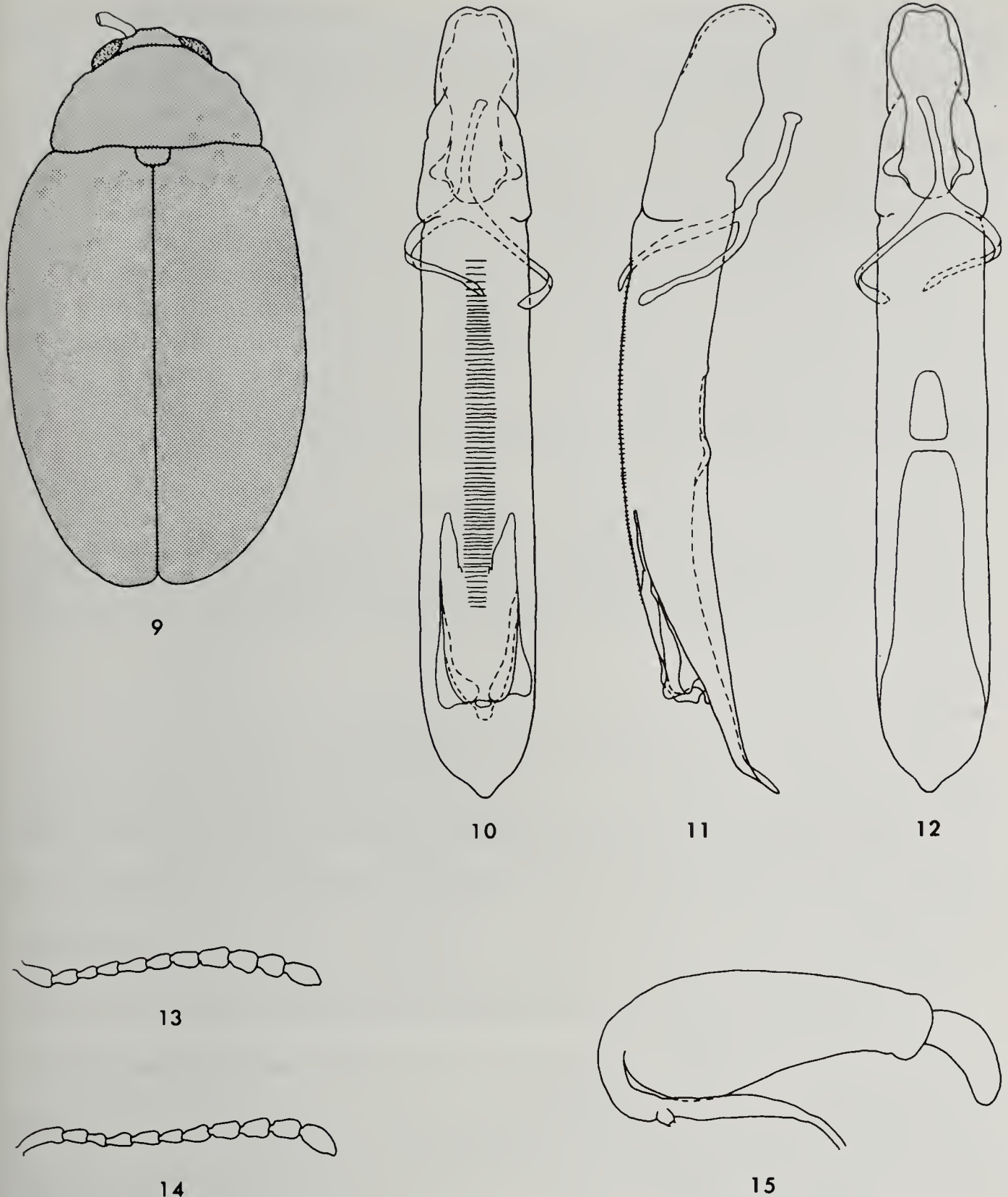
Examination of the genitalia of the types of *T. ovalis* also confirmed my suspicion that two species were represented (Figs. 2-4 vs. 10-12). In particu-



Figures 1-8: *Tanygaster* (= *Phyllotreta*). Figs. 1-5, lectotype of *T. ovalis*: Fig. 1, beetle; Figs. 2-4, male genitalia in dorsal, lateral, ventral views respectively; Fig. 5, anteriodorsal view of left antenna. Figs. 6-8, third female syntype of *Phyllotreta lindahli* (? = *T. ovalis*): Fig. 6, anteriodorsal view of right antenna; Figs. 7-8, spermatheca in dorsal and lateral views respectively.

lar, the genitalia differ markedly in the shape of the preapical region and apex in dorsal view and in the size, shape and position of the two depressions on the ventral surface. These two types also differ in overall size, the lectotype being shorter and smaller. The paralectotype is a specimen of *P. lindahli* Dury.

The type series of the *P. lindahli* contains one male (Figs. 9-13; designated here as LECTOTYPE) and three females. This lectotype designation is especially desirable because this series, too, contains two species. The lecto-



Figures 9-15: *Phyllotreta lindahli*. Fig. 9, male syntype; Figs. 10-12, male genitalia in dorsal, lateral, ventral views respectively; Figs. 13-14, antero-dorsal view of left antenna of male syntype and right antenna of first female syntype respectively; Fig. 15, lateral view of spermatheca of first female syntype.

type and the first female paralectotype (Figs. 14, 15) are labeled "Cin.O." and the second female paralectotype is labeled "Cin. O. V.30.5". The third female paralectotype (Figs. 6-8) is labeled "Cin. O. 5.20.6" and represents a different species (below).

Dury (1906:254) did not mention the procoxal cavities in his description of *P. lindahli*. Wilcox briefly examined the third female and thought that the procoxal cavities were closed. On this basis, he (1954) transferred *P. lindahli* to *Tanygaster*. However, the procoxal cavities of all four speci-

mens are open. In addition, the antennae and genitalia of both sexes represented by the lectotype and the first two paralectotypes are similar to those of *Phyllotreta*. Therefore, I transfer *T. lindahli* (Dury) back to *Phyllotreta*.

The third female paralectotype of the Dury series is probably a specimen of *P. ovalis*. However, the spermatheca (Figs. 7, 8) is unlike those of all other species of *Phyllotreta* which I have thus far examined in two major morphological features. The sclerotized duct is oriented laterally along the length of the receptacle instead of ventrally and in the same plane as the receptacle, and the anterior-posterior curvature in dorsal view is different. Undoubtedly, as I continue to work on my revision of the immaculate species of *Phyllotreta* and examine the thousands of accumulated specimens, I will find additional representatives of *P. ovalis* and *P. lindahli*. Then I may be able to determine if the spermatheca of this female is aberrant or normal, and whether or not this specimen is a female of *P. ovalis*.

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